

REMARKS

The Advisory Action mailed on October 16, 2007 indicates that the claim amendments filed on September 24, 2007 have been entered, and rejections based on 35 U.S.C. §§ 101 and 112, second paragraph have been withdrawn. Thus, Claims 1, 3-5, 7-13, 15, 16, 21-24, 27-33, 35, and 56 are pending. Among them, Claims 2, 17-20, 36-55, and 57-68 are directed to non-elected invention, and were canceled without prejudice.

Applicants respectfully request reconsideration in view of the following remarks. Issues raised by the Examiner will be addressed below in the order they appear in the Office Action.

Claim rejections under 35 U.S.C. § 112, first paragraph - enablement

Claims 1, 3-5, 7-16, 21-24, 27-35, and 56 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The Office Action argues that the enablement rejection is based on the full consideration of the *Wands* factors, and that ‘although the level of skill in molecular biology is high, the results of experiments in genetic engineering are unpredictable.’ The Office Action continues to rely on Ginalski, and argues that “the instant claims do not recite any limitation drawn to an assessment of sequence homology, nor do the instant claims require any requisite level of sequence homology between the ‘spacially conserved motif’ and the ‘recipient polypeptide’ as instantly claimed.”

The Examiner appears to hold the view that the claimed invention is directed to a foolproof method of engineering any and all spatially conserved protease motif into any and all recipient polypeptide. In an attempt to clarify the issue, Applicants’ attorneys Matt Vincent and Yu Lu conducted a phone interview with Examiner DeJong on March 24, 2008. Applicants’ attorneys wish to thank the Examiner for participating in the interview and providing constructive suggestions during the interview. The instant response also constitutes the required statement under 37 C.F.R. § 1.133(b).

During the interview, Applicants' attorneys clarified that the claimed invention is directed to an assay method comprising the recited steps. The Examiner also provided certain suggestions in terms of claim amendment in view of this clarification, and Applicants appreciate the Examiner's suggestions.

While Applicants disagree with the Examiner's arguments and reliance on Ginalski, Applicants have amended the independent claims 1, 21, and 56 to clarify the subject matter claimed. Support can be found throughout the specification. *See*, for example, the last paragraph of page 12, and the first full paragraph of page 20.

Applicants submit that the amended claims are directed to screening or testing methods to assess the possibility of incorporating a functional protease motif into a recipient polypeptide to confer protease activity to that recipient polypeptide. The result of performing the claimed methods is a determination or answer as to whether a particular protease motif can be engineered into a particular recipient polypeptide. This is loosely analogous to a drug screening method, where the compounds or compound library being screened may or may not have the desired drug activity, but the screening method itself can always be performed without undue experimentation. In other words, the methods are always enabled regardless of whether a "yes" or a "no" answer is reached after performing the method.

Therefore, even if what the Examiner was arguing is correct (which Applicants do not concede), that it is uncertain or unpredictable whether any *given* protease motif can in fact be engineered into a *particular* recipient polypeptide, one of skill in the art would always be able to carry out the claimed methods to determine whether or not the protease motif can be engineered into the recipient. In that sense, the Examiner's concerns based on Ginalski becomes largely irrelevant.

Thus, at least the claims as amended are enabled to their full scope. Reconsideration and withdrawal of the enablement rejections are respectfully requested.

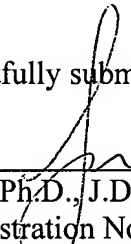
CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicants believe no additional fee other than those authorized in the accompanying Amendment Transmittal is due with this response. However, if any additional fee is due in connection with the filing of this response, please charge our Deposit Account No. **18-1945**, from which the undersigned is authorized to draw under Order No. **COTH-P01-002**.

Dated: March 24, 2008

Respectfully submitted,

By 
Yu Lu, Ph.D., J.D.
Registration No.: 50,306
ROPES & GRAY LLP
One International Place
Boston, Massachusetts 02110-2624
(617) 951-7000
(617) 951-7050 (Fax)
Attorneys/Agents For Applicant